

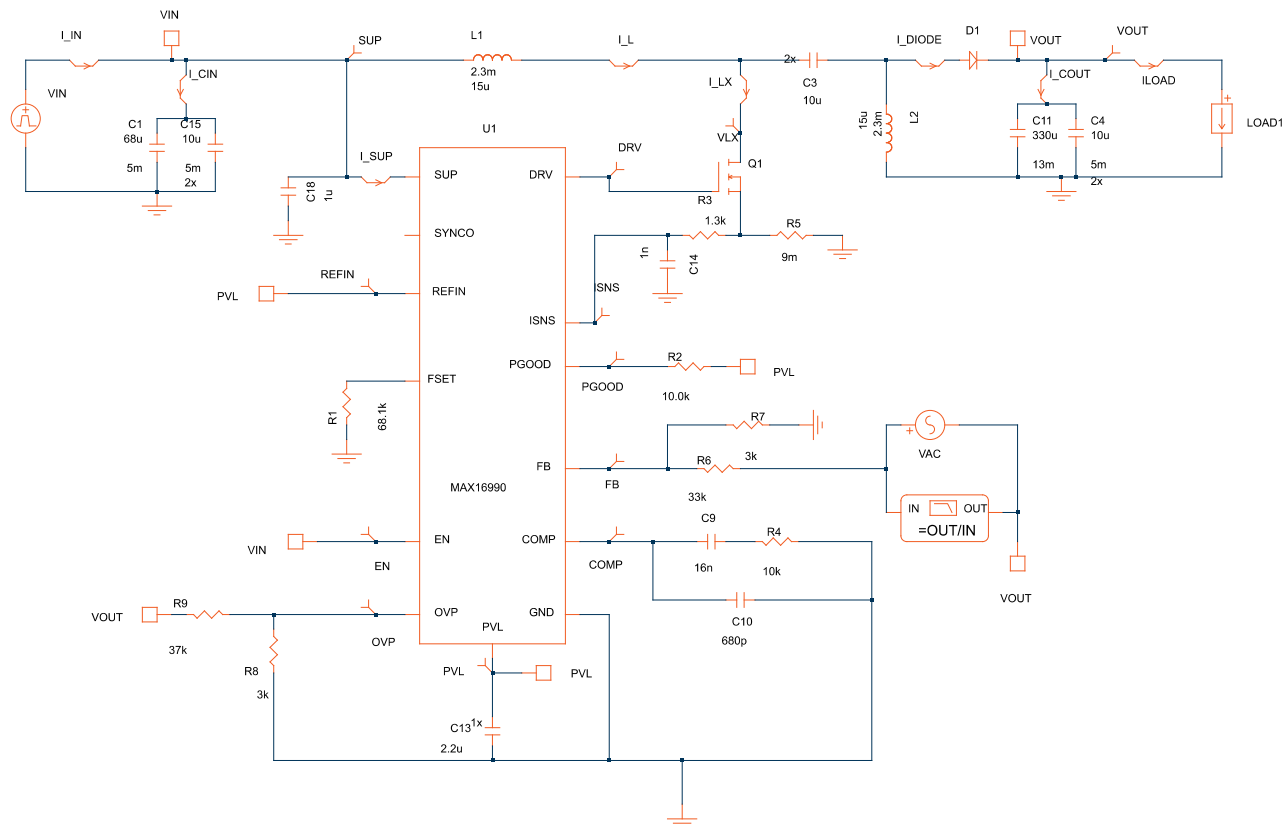
MAXREFDES1204 Single Output SEPIC Converter

EE-Sim® OASIS Schematic Documentation

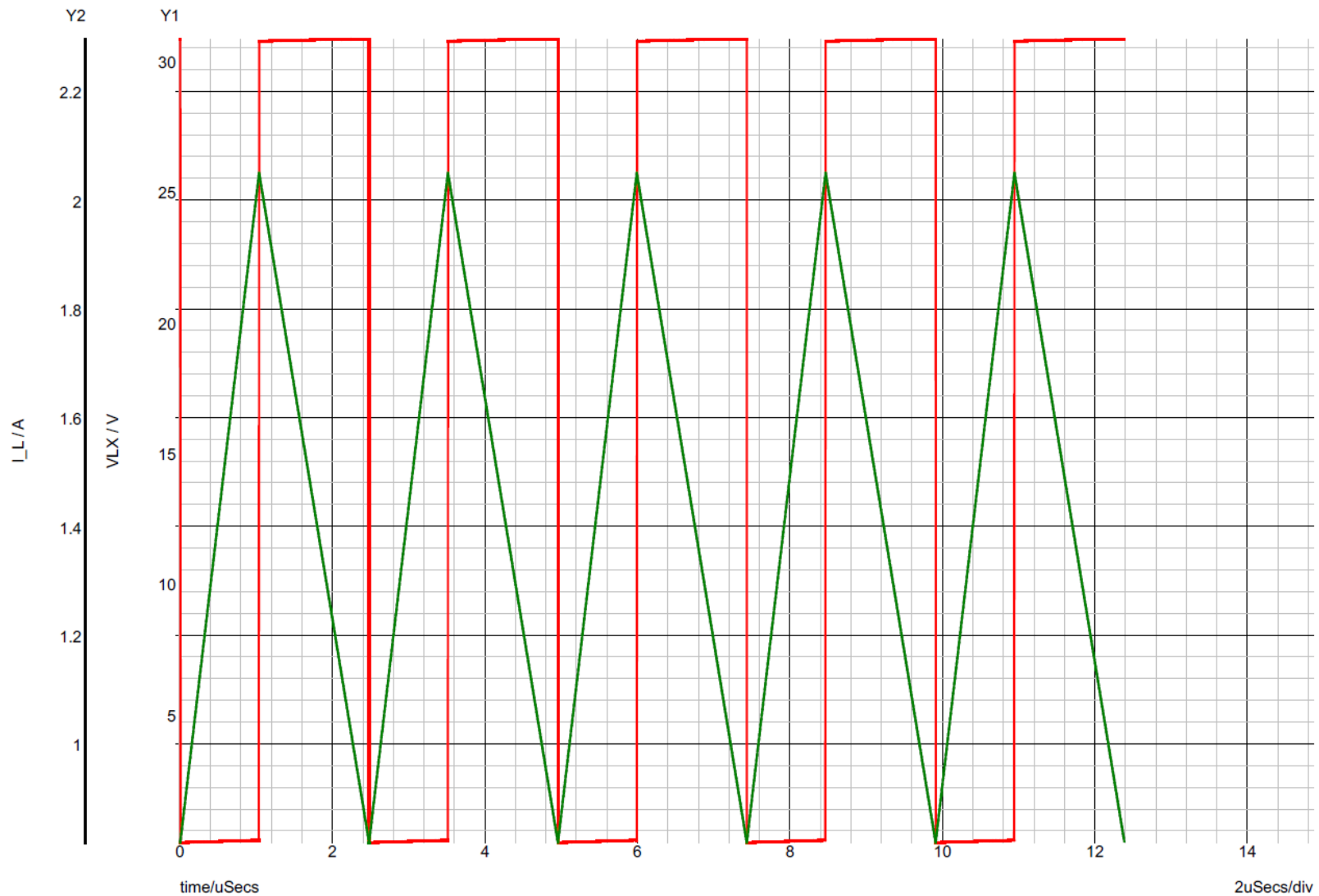
Design Requirements and Configuration

Primary Specifications	Values	Comments
Part Number:	MAX16990	
Schematic Name:	Single Output SEPIC converter	
Mode:	PWM Mode	
Default Simulation:	Steady-State (POP), AC Loop, Load Step	
Design Requirements:		
Vin(Max):	6V	
Vin(Nom):	12V	
Vin(Min):	18V	
Switching Frequency:	400kHz	
Vout:	12V	
Iout:	1A	
Other Key Specs		
Schematic Settings:		
Sync Pin:	Float	Skip Mode
FOSC pin:	68.1k	FSW = 400kHz
SIMPLIS GUI Settings:		
Soft Start:	Disabled	
Use External Clock:	Disabled	

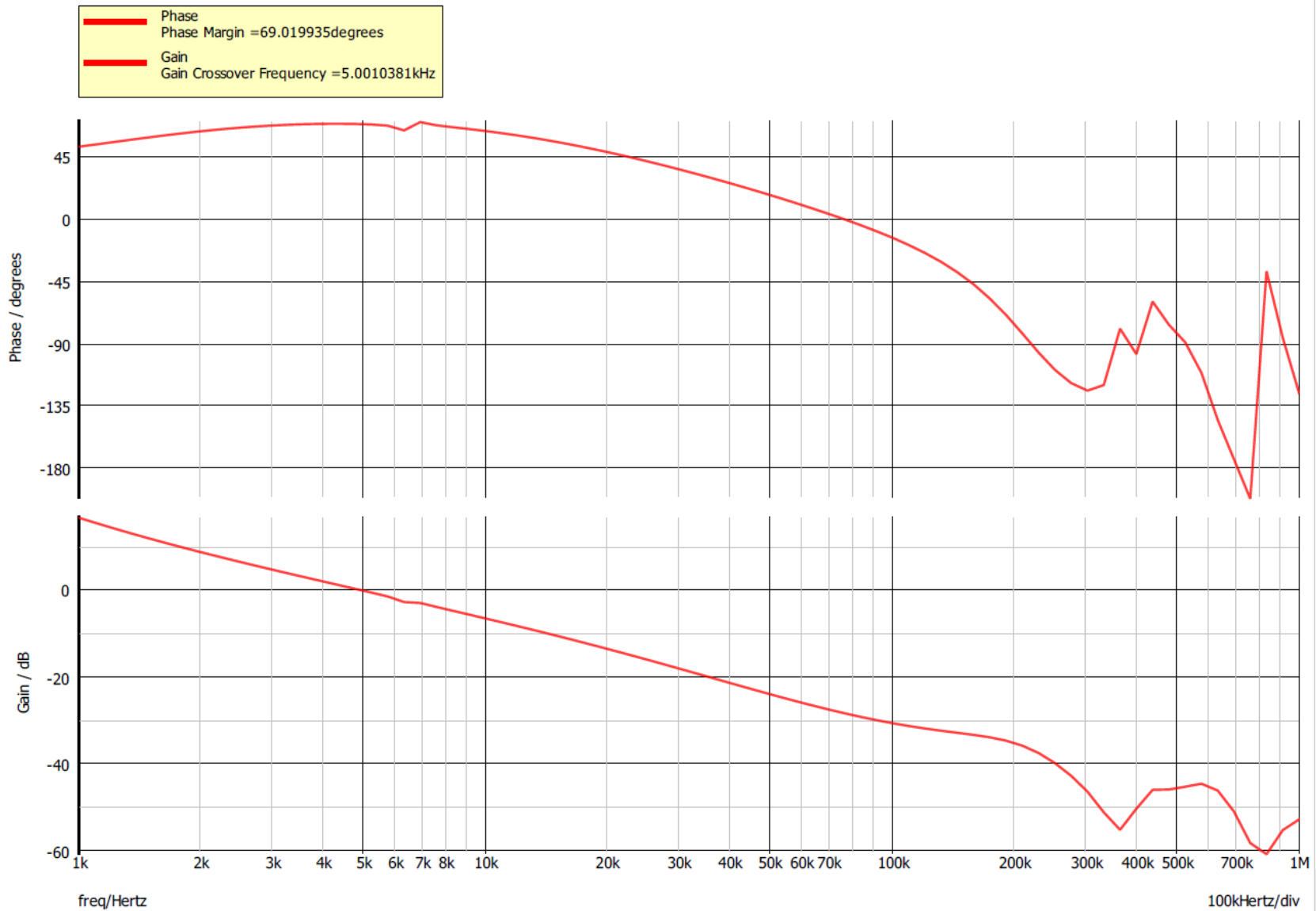
Schematic



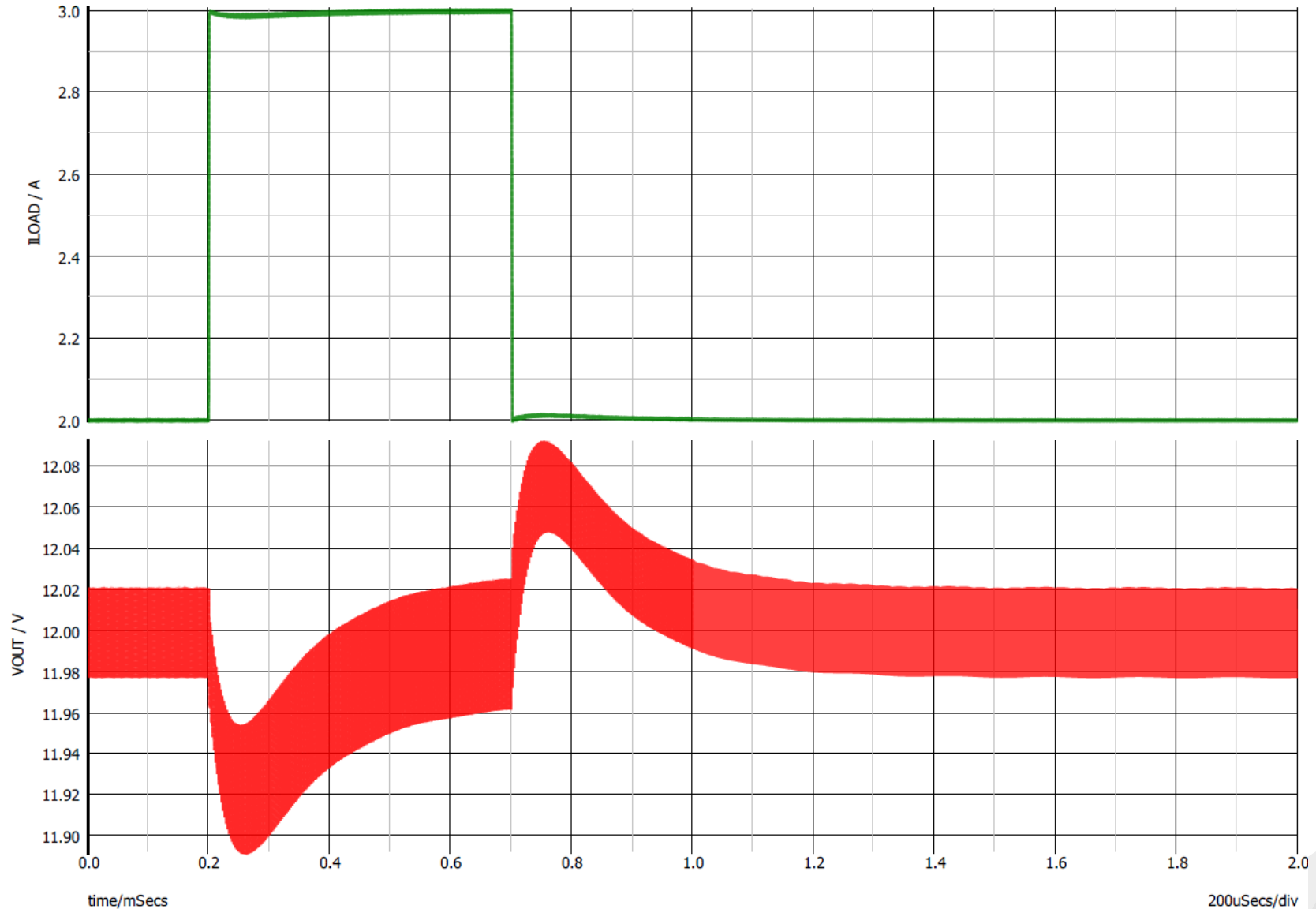
Switching Waveforms



Bode Plot



Load Step Transient Response



Startup

